Amendments to the Claims

      This listing of claims will replace all the prior revisions, and listings of claims in this application.

Listing of Claims

1. – 6 (Cancelled)

1   7. (Currently Amended) A method of determining the time t_{HOB} to a desired Height Of Burst
2   (HOB) of a projectile comprising the steps of:
3   a. determining, through the effect of a sensor on-board the projectile, when the
4   projectile reaches its apogee after launch;
5   b. measuring the actual time t_a that it takes said projectile to reach the apogee after
6   launch; and
7   c. calculating the time to the desired Height Of Burst t_{HOB} based upon the actual
8   measured time t_a;
9   wherein said on-board sensor is one selected from the group consisting of:
10   accelerometric sensor, gyroscopic sensor, velocity sensor, global positioning
11   sensor, inertial sensor, and MEMs.

1   8. (Previously Presented) The method of claim 7 wherein the calculating step c above
2   comprises setting the t_{HOB} as a percentage X% of t_a wherein said percentage is less than
3   100% and wherein $t_{HOB} = t_a + X\%t_a$.

1   9. (Previously Presented) The method of claim 8 wherein said percentage of t_a is calculated
2   as follows:

3   if t_a > 12 seconds then down leg time = 90% of t_a ;

4   if 12 sec > t_a > 9 seconds then down leg time = 70% of t_a ;

5   if 9 sec > t_a > 7 seconds then down leg time = 10% of t_a ;

6   if t_a < 7 seconds then there may be a malfunction and the projectile should be

7   disabled..

1   10. (Previously Presented) The method of claim 7 wherein said step <u>c</u> is calculated as

2   follows:

3
$$t_{HOB} = t_a + \sqrt{t_a^2 - 2 \times HOB/g + C}$$

4   where g=9.81 m/sec^2 = 32 ft/sec^2

5   and C = correction factor.

1   11. (Previously Presented) The method of claim 10 wherein said correction factor C is

2   calculated as follows:

3   if t_a > 12 seconds then C = 1.0 sec;

4   if 12 sec > t_a > 9 seconds then C =0.75 sec;

5   if 9 sec > t_a > 7 seconds then C = 0.5 sec;

6   if t_a < 7 seconds then there may be a malfunction and the projectile should be

7   disabled.